

0673

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

CHINESE RACES OF *POMATORHINUS ERYTHROGENYS* VIGORS

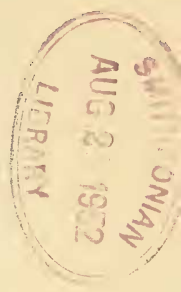
BY H. G. DEIGNAN*

My friend Arthur de Carle Sowerby has recently brought to my attention that, in 1908 and again in 1909, he collected in the neighborhood of Fushih [Yenan], in northern Shensi, specimens of a ferruginous-cheeked scimitar-babbler very distinct from *Pomatorhinus gravivox* David of southern Shensi. My examination of skins from the areas in question has confirmed his statement, but study of the literature of the species has shown such great discrepancy in the several authors' treatments of these birds, that the new form could be named only subsequently to a thorough revision of all the Chinese populations, which is attempted below. For the loan of valuable material, without which the study could not have been prosecuted, I am greatly indebted to the authorities of the Museum of Comparative Zoölogy (Cambridge), the Peabody Museum of Natural History (New Haven), the American Museum of Natural History (New York), and the Chicago Natural History Museum.

The taxonomy of this scimitar-babbler has been greatly complicated by the fact that the species breaks into three fairly well differentiated groups of races, one ranging from the western Himalayas to the Shan States and northwestern Thailand (*erythrogenys* and allies), another restricted to southeastern China and Formosa (*erythrocnemis* and allies), the third (*gravivox* and allies) occupying the intervening regions. Since *mccllellandi* of Assam and western Burma is an individually variable population, some members of which approach *erythrogenys*, while others are more like *gravivox*, even the earliest trinomialists did not hesitate to treat *gravivox* and *erythrogenys* as conspecific, but eventually Rothschild (Nov. Zool., vol. 33, 1926, p. 262) was to affirm that the two types were absolutely sympatric in central-western and northwestern Yunnan, and Ticehurst (Ibis, 1935, p. 47) that they were probably so also in northeastern Burma. These writers accordingly accepted the two species "*erythrogenys*" and "*mccllellandi*," under the latter name arbitrarily including all Chinese races of *gravivox*-facies, despite the fact that *mccllellandi*, whether geographically or by plumage, is obviously more closely related to *erythrogenys* than to *gravivox*.

Following Rothschild and Ticehurst's views, I have vainly attempted to find a single external character by which a given population of the ferruginous-checked scimitar-babbler might be assigned to one or the

*Published by permission of the Secretary of the Smithsonian Institution.



other "species," yet if their claims of sympatry were well founded, some such character must necessarily be discovered. Critical examination of these claims, however, has shown that they are based upon premises of dubious validity.

Rothschild reported that Forrest took two fledglings of "*Pomatorhinus erythrogenis imberbis* Salvad." at Tengyueh and in the Likiang range, at each of which localities he also collected adults of "*Pomatorhinus maclellandi odicus*." Rothschild was clearly unaware that fledglings of members of the *gravivox*-group are plain-breasted and for a time inseparable from those of members of the *erythrogenys*-group, and one of Forrest's skins (Tengyueh) that now lies before me (A.M.N.H. No. 586216) is in fact almost identical with an equieval topotypical specimen of *odicus*. Rothschild's statement that Anderson likewise took "*imberbis*" at Tengyueh is not confirmed by Anderson's own comments on the skin that he in fact misidentified as "*erythrogenys*": "This specimen agrees in every respect with one from Simla, except that the breast is dashed with dark-brown instead of dusky, of the same intensity as in *P. erythrocnemis*, Gould, to which it has wonderful resemblance in many ways; but the bright rusty of the knees and vent are not darker than the rusty on the sides of the abdomen and body generally" (Anatomical and Zoological Researches, comprising the results of the two expeditions to Western Yunnan, 1868 and 1875, p. 634, 1878). The "wonderful resemblance" to *erythrocnemis* of Formosa seems to show that Anderson was dealing with an example of *odicus*, the member of the *gravivox*-group common at Tengyueh.

With reference to eastern Burma, Ticehurst (*loc. cit.*) has observed: "... so near together as Bhamo [lat. 24°15' N., long. 97°14' E.] and Bernardmyo [lat. 23°00' N., long. 96°30' E.] *odicus* and *erythrogenys imberbis* are found, the two bearing little resemblance to each other, and no intergrades being known." It must be noted, however, that Bhamo is in the "distribution area" known as "North-East Burma," while Bernardmyo lies in the one known as "The Northern Shan States," and numerous plastic species are represented in these diverse areas by distinct races (*cf. Garrulax erythrocephalus forresti* and *G. e. woodi*). Sympatry in eastern Burma is, then, an assumption almost certain to be false.

Since all forms of ferruginous-cheeked scimitar-babblers from the western Himalayas to Formosa are apparently allopatric, and no characters of specific value can be found for separation of the several groups, all may be treated as races of *Pomatorhinus erythrogenys* Vigors, 1832.

I find in China ten recognizable subspecies, of which four are here to be named for the first time. Racial distinctions appear mainly in the general coloration of the upper parts, and since immature specimens show a tawny wash, and worn ones become more grayish, my diagnoses have been based wholly upon fresh-plumaged adults (October-January).

1. *Pomatorhinus erythrogenys odicus* Bangs and Phillips

Pomatorhinus maclellandi odicus Bangs and Phillips, Bull. Mus. Comp. Zool., vol. 58, No. 6, Apr. 1914, p. 286 (Mengtsz [lat. 23°23' N., long. 103°27' E.], southeastern Yunnan).

Pomatorhinus erythrogenys minor Delacour and Jabouille, L'Oiseau et

la Revue Française d'Ornithologie, vol. 11, pt. 2, No. 7, July 1930, p. 400 (Pa Kha [lat. $22^{\circ}32'$ N., long. $104^{\circ}18'$ E.], Laokay Province, Tongking).

Diagnosis: General coloration of upper parts olivaceous brown, with a rufescent suffusion; front and supraloral region, auriculars, sides of neck and breast, flanks, and under tail coverts vivid ferruginous.

Range: Southeastern Yunnan; northwestern Tongking; northern Laos; Southern Shan States (Kengtung State); southwestern Yunnan (north to Yunlung at lat. $25^{\circ}53'$ N., long. $99^{\circ}20'$ E.); northeastern Burma (vicinity of Htawgaw at lat. $25^{\circ}57'$ N., long. $98^{\circ}22'$ E.).

2. *Pomatorhinus erythrogenys decarlei*, subsp. nov.

Type: U. S. Nat. Mus. No. 312267, adult male, collected at Nguluko (a settlement at elev. 10,000 ft. in the mountains just north of Likiang), northwestern Yunnan, in January-February 1929, by Joseph F. C. Rock (original number 935).

Diagnosis: Coloration of upper parts similar to that in *odicus*, but with less rufescent suffusion, so that the general tone is darker and grayer; front and supraloral region, auriculars, sides of neck and breast, flanks, and under tail coverts of a slightly deeper and considerably less vivid ferruginous.

Range: Northwestern Yunnan (Likiang range); southeastern Sikang; southwesternmost Szechwan.

3. *Pomatorhinus erythrogenys stoneae*, subsp. nov.

Type: U. S. Nat. Mus. No. 296714, adult male, collected in the mountains near Yangtza [ca. lat. $28^{\circ}15'$ N., long. $98^{\circ}48'$ E.], northwesternmost Yunnan, in November 1923, by Joseph F. C. Rock (original number 1441).

Diagnosis: From *decarlei* separable by having the coloration of the upper parts a decidedly darker rufescent-olivaceous brown, and from *dedekeni* by having these parts a distinctly warmer and more rufescent olivaceous brown. Each of five specimens examined also has the pectoral streaks broader than I have found them in any example seen of any other race.

Range: Mekong valley between lats. ca. $27^{\circ}12'$ N. and ca. $28^{\circ}15'$ N.

Remarks: This form may be found to occur also in northernmost Burma and easternmost Assam, from neither of which areas the species is yet known.

It is named in honor of Mrs. Joan Evelyn Stone, *née* Sowerby.

4. *Pomatorhinus erythrogenys dedekeni* Oustalet

Pomatorhinus Dedekensi [sic] Oustalet, Annales des Sciences Naturelles, (Zool.) sér. 7, tome 12, "1891," p. 276 ("Tioungueu," error; type locality corrected to Tsonghai [lat. $29^{\circ}56'$ N., long. $98^{\circ}40'$ E.], Sikang, by Oustalet, Nouv. Arch. Mus. [Paris], sér. 3, tome 5, 1893, p. 197, footnote 1).

Pomatorhinus Armandi Oustalet, Annales des Sciences Naturelles, (Zool.) sér. 7, tome 12, "1891," p. 277 ("Aio," error; type locality corrected to Kangting [Tatsienlu], Sikang, by Oustalet, Nouv. Arch. Mus. [Paris], sér. 3, tome 5, 1893, p. 199).

Diagnosis: Near to *stoneae*, but with the upper parts a colder olivaceous

ous brown, more nearly free of rufescent suffusion than any other race, and to *decarlei*, but with the upper parts both colder and darker.

Range: Northeastern Sikang (Kangting [Tatsienlu], L \acute{e} h [ca. lat. 29°56' N., long. 98°40' E.], and Sama [lat. 30°35' N., long. 99°07' E.]).

Remarks: Immatures of this dark form, possessing the usual reddish suffusion of the upper parts, are much like adults of *stoneae*.

The subspecies was named in honor of Father Dedeken, a Belgian missionary who accompanied Bonvalot and Prince Henry of Orléans on the expedition which led to its discovery (see Bonvalot, *L'Asie Inconnue / A travers le Tibet*, in any edition). Oustalet's erroneous spelling has been followed by all authors until now, but in justice to the namesake it should be corrected to *dedekeni*.

5. *Pomatorhinus erythrogenys gravivox* David

Pomatorhinus gravivox David, Annales des Sciences Naturelles, (Zool.) sér. 5, tome 18, 1873, art. 5, p. 2 (southern Shensi).

Diagnosis: General coloration of upper parts nearest that of *odicus*, but with slightly less rufescent suffusion; front, supercilia, auriculars, sides of neck and breast, flanks, and under tail coverts a much duller ferruginous (along the flanks strongly suffused with olivaceous brown).

Range: Kansu and Shensi (so far as these provinces lie south of the Chinling Mountains).

Remarks: In this and some of the succeeding races, the supraloral and auricular regions are conjoined by a ferruginous supercilium.

6. *Pomatorhinus erythrogenys sowerbyi*, subsp. nov.

Type: U. S. Nat. Mus. No. 211874, adult male, collected 12 miles south of Fushih [Yenan-fu], northern Shensi, on January 8, 1909, by Arthur de Carle Sowerby.

Diagnosis: From *P. e. gravivox* (southern Shensi), with which it has been heretofore confused, immediately separable by the decidedly paler rufescent-olivaceous brown of the upper parts generally, and by the paler ferruginous of the front and supercilia.

Range: Although known only from the type locality, this form doubtless ranges throughout the loessland between the Ordos (to the North) and the Chinling Mountains (to the South).

Remarks: A second specimen, taken by Sowerby at the type locality on March 31, 1908, is now in the British Museum (Natural History). That the two skins agree in the characters mentioned above is indicated by the critical remarks and a water-color drawing made by the collector in his field diaries, which have been made available for my use. The pallor of *sowerbyi* is what might be expected in the northernmost population of the species, and in one inhabiting a semiarid terrain.

7. *Pomatorhinus erythrogenys cowensae*, subsp. nov.

Type: Amer. Mus. Nat. Hist. No. 204833, adult female, collected at Wanhsien, eastern Szechwan, on January 6, 1923, by members of the Museum's "Third Asiatic Expedition" (original number G 411).

Diagnosis: From *gravivox* and all other precedent races easily distinguishable by having the general coloration of the upper parts (including the rectrices) rufous brown, darker and redder than in any form

yet mentioned; the front, supercilia, auriculars, sides of neck and breast, flanks, and under tail coverts dark cinnamon (along the flanks strongly suffused with olivaceous brown).

Range: Eastern Szechwan, northern Kweichow, and southwestern Hupeh (the Yangtze valley from Wanhhsien to Ichang).

Remarks: The characters of this form have been remarked by Ticehurst (Ibis, 1935, p. 47) and by Mayr (Ibis, 1941, p. 67), each of whom, however, assumed that his material represented *gravivox*. The Kansu bird described by Mayr as "less brownish than six birds from eastern Szechwan" was his only specimen of true *gravivox*.

A single skin from Pingwu [Lungan] (in north-central Szechwan just south of the Kansu border) belongs with a population intergradient between *gravivox* and *cowensae*; it might be represented as *gravivox* > *cowensae*.

The new form is named in honor of Mrs. Alice Muriel Sowerby, *née* Cowens.

8. *Pomatorhinus erythrogegens swinhoei* David

Pomatorhinus Swinhoei David, Annales des Sciences Naturelles, (Zool.) sér. 5, tome 19, Nos. 3-6, May 5, 1874, art. 9, p. 5 ("Koatén" [ca. lat. 27°13' N., long. 117°12' E.], Fukien).

Diagnosis: This race is readily separable from all yet treated by having the feathers of the crown rufescent brown with blackish-brown centers; the remaining upper parts red-brown, much brighter on the mantle, where the color is maroon-chestnut; the front and ill-defined supercilia maroon-chestnut; the auriculars between maroon-chestnut and dark cinnamon; the under tail coverts dark cinnamon; the sides of the throat, breast, and abdomen gray (not ferruginous or cinnamon), strongly washed along the flanks with rufescent-olivaceous brown.

Range: Eastern Kiangsi; Fukien; Kwangtung.

Remarks: This and the two following forms have commonly been considered a species distinct from other ferruginous-cheeked scimitar-babblers (usually with the erroneous specific name *swinhoei*, 1874, rather than *erythrocnemis*, 1863!), but I find no reason not to combine them, since *cowensae* shows a first step toward intergradation between *gravivox* and *swinhoei*, and other steps may be expected in hypothetical populations of Kiangsi, Anhwei, and Chekiang. Approach toward *swinhoei* appears in *cowensae* in the general reddening of the plumage and the strengthening of the dark centers of the coronal feathers, so that, viewed from above, only the fact that the mantle of *cowensae* is concolorous with the remaining upper parts serves to distinguish the two.

While the gray under parts of *swinhoei*, washed on the flanks with rufescent-olivaceous brown, are at first glance very different from the white under parts of *cowensae*, washed on the flanks with dark olivaceous-suffused cinnamon, yet the existence of an intermediate population in Anhwei or western Kiangsi may be postulated by the fact that the northernmost example of *swinhoei* before me (from Kuatung, near the point where Fukien, Kiangsi, and Chekiang meet) has the flanks washed with rufescent brown, almost without olivaceous suffusion, while more southern specimens have the flanks olivaceous brown, almost without rufescent suffusion. Moreover, the principal color distinction appearing

on the under parts of *cowensae* and *swinhoi* is precisely the same as that shown by the nearly related Indian races, *ferrugilatus* and *meclerlandi*.

It might be well to point out that David's "Koatén" (sometimes rendered as "Kaotén" or "Kao-tien," and almost the same place as the modern "Ting-chia-p'ing") is apparently *not* the same as La Touche's "Kuatun" (better, "Kuatung"). On the sketch map that accompanies La Touche's *Tandbook of the Birds of Eastern China*, "Kuatun" is plainly marked; "Koatén" is not shown, but lies about nine miles west of "Shaowu-fu," which does appear. Since my specimen from Kuatung differs in flank coloration from birds of Nanping [Yenping] and southward (which agree with David's original description of "Koatén" birds), it is important that the two localities be not confused.

9. *Pomatorhinus erythrogenys abbreviatus* Stresemann

Pomatorhinus swinhoi abbreviatus Stresemann, *Journ. für Orn.*, jahrg. 77, hft. 2, Apr. 29, 1929, p. 333 (Yao-shan, Kwangsi).

Diagnosis: According to the describer, this race, founded upon a single female, compared with 11 specimens of *swinhoi* from Kwangtung, differs from *swinhoi* by shorter bill and wing; by having the throat and upper breast washed with pale rusty (not pure white); the gray of the under parts darker; the under tail coverts dark ferruginous brown (not dark cinnamon).

Range: Kwangsi.

Remarks: The type, taken on June 20, is doubtless a worn bird, which fact may have some connection with its coloration, and its sex could account for its small size. There is, nevertheless, a strong likelihood that the population of Kwangsi is distinct from that of Fukien.

10. *Pomatorhinus erythrogenys erythrocnemis* Gould

Pomatorhinus erythrocnemis Gould, *Proc. Zool. Soc. London*, for 1862, pt. 3, Feb. 1863, p. 281 (Formosa).

Diagnosis: This form has the feathers of the crown with more nearly black centers and deeper rufescent-brown edges than *swinhoi*, so that this area is generally darker; the remaining upper parts as in *swinhoi*, but with the mantle chestnut-brown (not bright maroon-chestnut); the front, supraloral region, anterior auriculars, and under tail coverts maroon-chestnut; the posterior auriculars, sides of throat and breast, and flanks deep rufescent brown.

Range: Formosa.